

Control Data® 892/892-60 Data Modules

Business Products Group



Control Data 892/892-60 Data Modules are removable storage devices used with IBM 3340 Data Module Drives. Data modules of this series and their associated drives provide rapid, random-access data storage for computer systems. These modules are certified for use at 300 tracks per inch, with a recording density of 5500 bits per inch.

Compact design and efficient engineering have produced an easy-to-use, dependable data module. A molded handle is provided on the canister, which aids the operator in placing the module on the disk drive's holding platform.

When the operator closes the module access cover and presses the start switch, an automatic load sequence is initiated that includes the following steps: the sealed access door is opened, the module's read/write head-arm carriage is attached to the voice-coil motor, filtered air is supplied, an air purge cycle is initiated, and the magnetic heads are positioned over Cylinder 0. A ready condition is achieved within 20 seconds after the start switch is activated.

Data modules of this series include the 892 and 892-60. Both modules have 70-million byte capacities. One-half million bytes of storage on the 892-60 Module are from nonaccessing heads.

Each data module is comprised of a spindle, read/write and servo data disks and heads, and a head-arm carriage mechanism. These components are enclosed in a canister that is molded from a strong polycarbonate material and provides a dust-protected environment.



The disks are 356 millimeters (14 inches) in diameter and 1.9 millimeter (0.075 inch) thick. Disk base material is aluminum, coated with an oriented ferromagnetic oxide in a suitable binder. These disks provide data recording surfaces and a prerecorded servo data surface. Servo data provides precise track location information for each of the 350 physical cylinders. Prerecorded servo tracks supply information for positioning the read/write heads, for clocking read and write information, and for sensing rotational position.

Features

- Sealed Unit—Requires no field maintenance.
- Reliability—Data is always read by the corresponding record head. No CE alignment packs required.
- Defect-Skip—Allows a disk surface defect to be bypassed without loss of capacity and does not require an alternate track. Defect-skipping information is prerecorded into the format by the manufacturer.
- Economical—Outstanding cost-per-bit performance.

All Control Data modules are designed and manufactured under strict quality-control conditions and carry a lifetime warranty.

Specifications

General	Model 892	Model 892-60
Recording Format	IBM 3440, standard	IBM 3440, standard
Number of Disks	4	4
Data Surfaces	6	6
Recording Heads		
Movable	12	12
Fixed	—	30
Servo Heads	1	1
Logical Tracks per Physical Track	2	2
Logical Cylinders per Physical Cylinder	24	24
Logical Cylinders per Data Module	696	696
Alternates	2	2
Customer Engineering	2	2
Physical Tracks per Physical Cylinder	12	12
Byte Capacity per Logical Track (max)	8368	8368
Byte Capacity per Data Module		
Movable Heads	69,889,536	69,287,345
Fixed Heads	—	502,080
Track Width		
Movable Heads	3.34 mils	3.34 mils
Fixed Heads	—	30 mils
Track Spacing (tracks/in)		
Movable Heads	300	300
Fixed Heads	—	33
Bit Density (bits/in)	5500	5500
Operating Speed (r/min)	2964	2964
Physical Characteristics		
	Millimeters	Inches
Height, Approx	187	7.38
Width, Approx	406	16
Depth, Approx	457	18
Weight		
Model 892	8.86 ± .5 kg (19.5 ± 1 lb)	
Model 892-60	9.31 ± .5 kg (20.5 ± 1 lb)	

Specifications subject to change without notice

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